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We begin this issue with the conclusion of a weighty dispute in the late 700s between England and France. This is followed by an expoloration of how gold was used as primarily a commemorative or burial material on Chinese coins. The first part of a discussion of French colonial issues forms our concluding piece.

As usual, all submissions welcome.

Joseph Uphoff
Editor

Brexit and Troy Weight Part II

Robert Tye

In the first part of this article I drew attention to a nearly forgotten breakdown in trade, between England and the Continent - Offa and Charlemagne - around 790 AD. Associated with the event was a revision of coin weights. Further evidence from exactly that time suggests an associated quest, for the original true Biblical weight standard, that was attributed to Moses in Leviticus. I suggested that such a Biblical quest led to the importation of a weight standard from the Oriental Abbasid Court, then ruling Jerusalem, to Offa's Mercia, a weight standard that would later become known as Troy. In its 16oz version, a Troy pound comprised 10,240 Troy weight grains and weighed c. 497.6g.

English coin and weight standards both became very complex, obscure and confused in the later Anglo- Saxon period. Indeed, Troy itself did not clearly and consistently become the national standard for bullion and coin until the 16th century. However, clues about its ancient origins came to light in early 18th century when Hooper and Arbuthnot noticed that English Troy very closely resembled a traditional Islamic weight system[1]. In 1967 Skinner[2] at the London Science Museum pointed out that both England and Islam employed very similar parallel systems of weights, one heavier (Troy) for bullion, and a lighter one, reduced by $^{1}/_{16^{th}}$, (Sterling/Tower) for coinage.

Since the dual system we would call Troy/Sterling was only applied in Islam during c. 700 - 870 AD, it immediately becomes obvious that the 793 AD penny weight reform taking it close to theoretical Sterling weight (actual 1.46g, achieved average 1.42g) is the most likely candidate for the original date of introduction of Troy. Physical evidence concerning weight standards in the Anglo-Saxon period is sparse, but both Grierson and Conner have built positive cases for early use of Troy.

The origin of the English name for the system, "Troy" is considerably later, and easy to guess at. The 14th century bankruptcy of Edward III handed much power over English affairs to Florentine bankers. It seems very likely that the alternative weight system, called Avoirdupois or Imperial, applied to common goods rather than precious metal, is based rather exactly on the Florentine ounce, and was probably newly imposed under their stewardship. Thenceforward with two rival weight systems on the go, two names were required to distinguish them, and it seem that in the later 14th century the name "Troy" for created for the older system, to distinguish it from its upstart rival. By that date, popular understandings of history had moved away from the Biblical accounts of Leviticus, to the rather fanciful efforts of Geoffrey of Monmouth in his "Historia Regum Britanniae". That work traces the foundation of Britain to the efforts of an imagined Trojan colonist, Brutus. Most probably a long established official (Troy) system was being patriotically dignified by claiming it to be the original standard, brought from an Ancient Oriental source, Troy, by said Brutus. A fanciful falsity in large part, but not without a grain of truth.

Fig. 1. Cologne pfennig, Archbishop Heinsberg (1167-1191), c. 1.46g

The above summarises a basic understanding of this matter regarding English affairs. What happened in Continental Europe remains somewhat obscure, I can only offer a few clues. Grierson[3] seems to have been correct in his account of Charlemagne's weight system, which emerging around 794 AD. Charlemagne struck 256 pennies from a 16oz pound, but handed only 240 of them back to the client, much as

was apparently the case in England, both deriving from Eastern practice.

But importantly Charlemagne favoured a different Attic pound standard of 16 Roman ounces, c. 437g, yielding a heavier penny of c. 1.70g, and an internal or monetary pound of 15 Roman ounces, c. 409g. Such a pound survived into 13th century and beyond in the town weights of Toulouse. French national standards seem to have been revised again in the fourteenth century, perhaps to more closely mimic Troy. Charlemagne's grain continued unchanged, butthe later pound comprised 18 rather than 16 Roman ounces, thus 489.5g and thus, probably by intention, 63/64 x Troy.

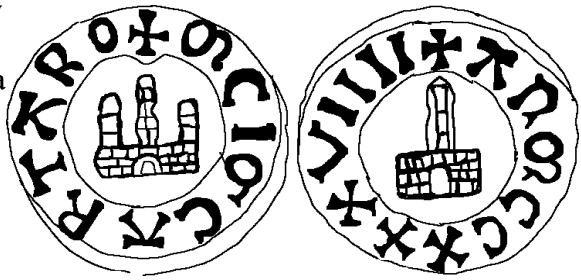

Fig 2. 2 ounce weight from the Tolouse/Narbonne area, dated 1239. c. 50g (nominally) to the Carolingian c.409g standard

However, events on continental Europe do not appear to have been monolithic, and clear evidence for the basis of the variations eludes me. Cologne weight, the system applied to coinage by the Holy Roman Emperors, did not follow Charlemagne's lead, but seems to exactly resemble the English Sterling system, initially yielding pennies of 1.46g, thus exactly half a canonical Islamic dirhem. According to Engel and Serrure this standard was already established by the time of Otto I in the mid-10th century, thus more than a century earlier than the date it was consistently applied to the English Sterling pennies. We have established a plausible narrative which got the Islamic standard to the court of Charlemagne, from where it is adopted by Mercia but rejected by Charlemagne himself, in part due to some contemporary feud over tariffs. But how then did it get to Cologne? The best guess concerns the alliance by marriage of Otto with the English princess Edith, putting an English alliance at the root of Otto's rise to prominence over the

Frankish Carolingian line. A second possibly involved factor might be the involvement of Jewish scholars with international connections. It seems very likely indeed that information reached the Carolingian Court from Baghdad via Jewish intermediaries. Further to that, the stabilisation of English coin weight around the Sterling standard seems to begin in 1083 AD, quite possibly on the advise of certain Jews of Rouen adopted as economic advisors by William I. Thus the existence of a very well established Jewish community at Cologne suggests another possible influence. If anyone can suggest ways to expand, corroborate or refute either of these suggestions I would be very pleased to hear.

Fig 3. Cologne pfennig, Otto III (983-96), (1.17g) Spink Auction 16005, lot 176. I note that the early deniers of Otto and his successors often seem to weigh well below sterling.)

There is one last piece of evidence that I shall turn to. Above we saw how nationalistic rivalries very probably inspired the historical weight systems themselves. This further piece of evidence will illustrate instead how nationalistic rivalries played a part in clouding our understanding of those historical weight standards.

A couple of years ago I was touring the wonderful museums of Rome, when I spotted an old weight inscribed CAROLI PONDUS. It is sitting rather anonymously, amongst a miscellaneous group of other early weights, in a glass cabinet at the Crypta Balba Museum[4].

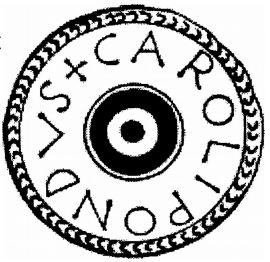

Fig 4. A drawing of the Kircher weight, now in the Crypta Balba Musem, published by Blacard in 1889

Investigating the weight further I found that it prompted excited correspondence when first discovered in the early 17th century. At that time it passed into the hands of Athanasius Kircher, (sometimes called "the last man who knew everything"). In the late 19th century it created a bigger controversy. Rediscovered by leading French scholar Blancard, he interpreted its weight as being close to the old Paris weight standard[5], and thus claimed it as evidence that France, and not Germany, was the faithful protector of the true ancient standard of Charlemagne. Soon after he was rather fiercely criticised by an Italian scholar, Capobianchi, who argued that the weight was not to a German or French standard, but to an Italian one, the Ancient Roman. Capobianchi[6] located three other similar weights which most certainly do seem to represent the Roman ounce standard, as Grierson has led us to suspect. However, in an effort to close his case, Capobianchi interpreted the 186.42g weight in question as a poor attempt to make a seven ounce Roman weight. A seven ounce weight in this context seems to me about as likely as a $7 bill would today. Yet such is the backwater that metrological studies have become, that more than a century on, it is still described as such in the museum catalogue. Nobody in France, Germany or Italy seems to have noticed a fact that came into my mind that same night, as I lay waiting for sleep. That at 186.42g the weight actually weights almost exactly six English Troy ounces (today fixed at 186.62g), thus half a Troy pound.

Scholarship could so easily have run on a different course. In 1721 Hooper announced an Islamic origin of English Troy, but his primary evidence were clues somewhat implicit in the work of John Greaves, who had travelling to Egypt from Oxford during 1638-40 to measure the pyramids. Greaves actually met with Kircher in Rome, but on his way out to Egypt, before he made his observation There is no record that he ever saw this weight. If he had called on his way back, and had seen this weight – the conclusions laid out here might have been understood and published three centuries back.

Returning to the weight now lying in the Crypta Balba museum. Capobianchi suggested a century ago that it belonged to a group of five standardised weights, all calibrated in Roman ounces. That seems

wrong intwo ways, as taking the standard from the average of the other four weights, seven Roman ounces should approximate about 191g, and anyhow, why a 7 ounce weight anyway? Rather it seems the Crypta Balba weight is an odd man out, perhaps a left over from an aborted earlier plan, representing an Oriental weight system retained subsequently England but swiftly abandoned in France. A remnant of a lost plan to unite all Western Europe around the original true Biblical weight standard, a plan that somehow got scuppered amid inter-dynastic wrangling about power, prestige and royal weddings, but more fundamentally, about tariffs and trade balances, during that earlier Brexit.

1. George Hooper An Inquiry into the State of Antient Weights and Measure, 1721. John Arbuthnot Tables of Ancient Coins, Weights and Measures 1727

2. F. G. Skinner Weights and Measures 1967

3. Philip Grierson Money and Coinage under Charlemagne (1965, reprinted 1979)

4. Crypta Balba Museum Catalogue Roma. Dall'antichità al medioevo. Archeologia e Storia. Nel Museo Nazionale Romano Crypta Balbi, 2001, item number IV.10.23

5. Louis Blanchard, La Livre de Charlemagne d'après le Karoli Pondus du musée Kircher, 1889

6. M. V. Capobianchi Les Caroli Pondus conservés en Italie, 1900

Thanks to Spink, and a private collector, for the coin image

The Use of Gold as a Medium of Exchange in Chinese Culture

Joseph Uphoff, NLG NI#1411

Commencing with the Shang, cowrie shells were used as a form of trade. Eventually, other items joined them such as knives and spades. With any item, imitations would be produced. With the shells, these were

Fig 1 Cowrie Shell 600 BC

Fig 2a Chu Kingdom 400-220

Fig 2b Chu Kingdom

most often made in bronze, and rarer in ivory and jade. By the mid-Zhou, sevaral places were manufacturing these and were exchanged based on weight without any standard from the Zhou monarch. One material that was rarely used was that of gold, which was plated onto bronze shells. These commenced as early as 600 BC (fig. 1). Whether these circulated or were strictly used as an indication of status or only as grave goods is an open question.

What is not in doubt is the use of gold as currency by the Dukes, later Kings of Chu. These are relatively flat sheets divided into smaller units with a stamp on each square. (figs. 2 a-b) Most of these were originally rectangular, however, some can be round. As each large block was

segmented, it can be surmised that they could be cut to make change. In recent years, sevaral of the single units have appeared for sale. The larger pieces are considerably rarer. Each unit being inscribed with “ying yuan”. Their manufacture seemed to have commenced around 400 BC and lasted until the Qin conquest in 225 BC. There was no uniform weight to the single pieces implying there was none with the sheets from which they came.

By the time of the Han, gold coinage were made to be used as a burial item. These were standard bronze coins plated with gold. This practise continued for sevaral centuries, through at least the Ming with the characters on them being reflective of the dynasty when they were made. Figure 3 is a Tang Dynasty example (618-907). The plating was probably privately commissioned through a goldsmith rather than being an official government issue.

Fig 3 Tang Dynasty Burial Coin

For those who could not afford plating but still wanted to use gold, there was the option of gilding. This being the application of a thin layer of one metal over another. As the coins were bronze, that became the base from which the gold was applied. Figure 4 is one such example made during the Northern Wei. The base piece was minted during the Taihe period of Emperor Xiaowen which extended between 477 and 499.

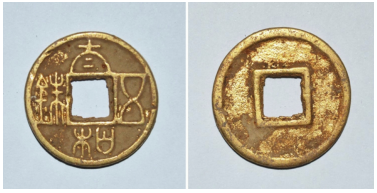

Fig 4 Northern Wei

Fig 5 Jin Dynasty 5 Taels

While bronze coins were minted by a central authority, people soon realised carrying huge quantities of them was impractical. The solution to this was the private manufacture of silver bars as early as the Qin. It would not be until sometime during the Tang that an exchange rate of 1000 bronze to one silver bar of around 3.2 grams was established. This unit was named a tael and became a standard measure of weight. These were often molded in the shape of boats and included sevaral characters within. Figure 5 is an example in gold from the Jin Dynasty (1116-1234) weighing 186 grams, which equals 5 taels. They controled a region in northwest China. Much of this territory was governed by the earlier Northern Wei. There was no differentiation in weight between gold and silver sycee, however, there was probably one in value. In addition to being used as currency, they became commemorative items and continue being used as such to the present.

Silver was not used as a currency medium by any central government until around 1890 when the Qing adapted European minting techniques for their coinage. As an aside, traditional minting practices were maintained until the republic was established. Gold was contemplated and a few patterns made, Figure 6 being one of them: it never saw general circulation. A pattern piece being an object officially sanctioned by the government of what a coin might look like prior to its approval for general circulation.

Fig 6 Qing 1905 1 Dollar Pattern

Revolution brings change in many aspects of life. One such change, once the republic was established, was the introduction of gold as an official metal from which coinage could be made. Figure 7 is an early example. These were made and circulated over sevaral years.

Fig 7 Republic 1912 1 Dollar

In addition to its use as currency, gold and other metals have been strictly traded based on weight and quantity of the given metal present. As a bullion market was developing in the 1970s, China decided to enter and began producing objects for trade in 1982. (figure 8) By this time, the panda had been adopted as a national symbol, hence its appearance on these. While primarily designed to be exchanged based on weight, they could also be used in normal commerce with 100 yuan representing 1 ounce. Fractions and multiples designated the amount of gold in each.

Over the millennia, gold has formed a part of China's economic system, either via private manufacture and use or government authorisation.

Fig 8 China 100 Yuan 1982 (1 ounce gold)

The French Colonial Stampee- Advancing the Narrative

David Wolfer, NI# 2793

Preface and 1st Article of the Royal Edict of Versailles, January 1763:

> Louis, by the grace of God, king of France and of Navarre. To all present and those to come, I salute you. By our edict of 1721, We ordered the issue of 150,000 marcs in copper coins for our Colonies in America, and by our Edict of December 1730, We also ordered the issue of 40,000 marcs in silver coins of 12 and 6 sols for our Colonies of the French Antilles; but those aforementioned coins have almost all disappeared, and our colonies more than ever in need of small currencies, We resolved to use and send billons to facilitate local commerce and bring relief to the poor population (in their transactions). For these reasons, We, with our almighty science, power and royal

> authority, have ordered this current Edict, said, and ordered the following:
>
> First Article: Be it immediately re-purposed by the Paris Mint, or any other Mint furthermore ordered by His Majesty, a reissue, worth up to six hundred thousand livres, of the billon which had been minted following the Royal Edict of October 1738, these coins to be stamped only on one side with a particular stamp which will be engraved by the official stamper of our Monies, following the design stamped under this present Edict, to be used in our Colonies.[1]

The above order formally introduced to the world the French colonial coin commonly referred to today as the *stampee*. As directed by law, a "particular stamp" (the Crowned C, a motif believed to represent the French monarch's colonial empire) was struck uniface on old billon 2 sous in circulation since 1738. Bags of these worn coins had been languishing in storage at the Paris Mint.[2] Upon arrival in the West Indies, their recycling into a new billon currency was met with enthusiasm by inhabitants of the French Antilles.

The coin's popularity caused local valuations to increase. Mazard cites an Edict of July 2, 1764 setting the stampee's value at 2 sols 6 deniers. He writes, 'In 1765, it became necessary to make another shipment of coins, and to stop its export, the value of the "Tampé" was fixed at 3 sols 9 deniers. In Cayenne, the coin's value was only 2 sols…'[3]

According to Zay, a modification to the stampee was carried out in 1779.

1Zay, E. *Histoire monétaire des colonies françaises.* Pgs. 65-66. All translations of the French texts within this paper are courtesy of Martine Dor.

2Vlack, R. *The French Billon Coinage in the Americas.* Pgs. 138-139.

3Mazard, J. *Histoire Monétaire et Numismatique des Colonies et de L'union Française* Pg. 33.

> This currency was widely used and in high demand; therefore, a royal ordinance dated December 10, 1779, requested that 30,000 livres worth of billons be sent to Cayenne. As there were no more of the original "Marqué" coins to re-use, they were forced to stamp the new currency on the flans of new billons.[4]

Billon coins exported to the French Antilles experienced a regional dispersion by way of local trade. Even on islands controlled by other nations, merchants and settlers were always eager to accept the stampee as small change in their marketplace dealings.

High valuations and heavy demand for the stampee caught the attention of counterfeiters, who flooded the West Indies with copper forgeries. The presence of these base coins drove authentic stampees from circulation. This situation did not deter the fake stampees from continuing to circulate, however. The desperate need by islanders for small change would take precedent over the imposter's lack of intrinsic value.

We are fortunate that French ordinances pertinent to the stampee's history are available today to provide insight on the subject. But first, a clarification is in order with regard to the term *sou marqué.*

The *sou marqué* moniker has been used interchangeably throughout French numismatic history to describe several different billon coins that traded in the French colonial empire- countermarked douzains of the 17th century, the double sous of 1738-1764, the sol estampés or stampees (the subject of this discussion), and the Cayenne 2 sous that followed. Because the same nickname has been applied equally over time to French billon coins with similar metrics but distinctly dissimilar designs, attention must be carefully paid to documents and first-hand accounts when ascertaining which particular billon issue is being discussed.

4Zay, pg. 69.

Cayenne's Royal Edict of December 10, 1779 is a case in point. Here we find the sou marqué properly identified within this document. "His Majesty requests that up to 30,000 livres worth of *2 sous marqués with a C* be sent to the colony [Cayenne] to be used as small change."[5] There is no question this proclamation refers to the French colonial stampee.

Cayenne's Edict of 1779 established new exchange rates for the stampee (presumably along with any other previous billon 2 sous still in circulation) that effectively downgraded its worth from the official rate of 2 sous/24 deniers to 1½ sous/18 deniers. Since the stampee is the focus of this particular decree, it is assumed the reduction in value was in response to the persistent influx of fakes infiltrating local commerce. The wording of the edict, however, was careful not to draw attention to this reality; instead, an ongoing war and the resulting dearth of small change were stated as reasons for the stampee's redress:

> His Majesty, in order to avoid, in this time of war, not only the penury of coins in Guiana, but also the overrated value of the piastres [Spanish colonial 8 reales] and sous marqués [stampees] currently in circulation over there, has requested and requests that the piastres and sous marqués will be received and traded for payment by the colony's Treasurer on the basis of their specific value; that is to say, the piastre will be valued at 5 livres 8 sous and the roll of 60 coins of 6 liards [stampees @ 3 deniers p/liard] will be valued at 4 livres 10 sous [18 deniers each].[6]

The idea that additional billon stampees were sent to Cayenne by order of the French Crown sixteen years after their inauguration into West Indies commerce is thought-provoking. One would assume these pieces, whether stamped over worn hosts as seen in 1763, or new planchets in 1779 as Zay contends, would have contained intrinsic silver, since this

5Zay, pg. 84.

6Zay, pg. 84

was an essential component of the original issuance. Even the statement by Zay describing 'flans of new billons' attests to the idea. The presence of silver in this later group would also explain the coin's continued enthusiastic acceptance by islanders. Yet spurious stampees had been driving authentic stampees out of circulation for a decade or more by the time the order for this new supply was placed. Did French monetary officials really expect new supplies of stampees to circulate locally without meeting the same fate as the first stampee issuance in 1763? If so, the marketplace would be quick to instruct them otherwise.

Within two years, French monetary officials realized their error in authorizing the stampee issuance of 1779 for Cayenne. A retraction in thought came by way of a *Royal Declaration about the money of Guiana,* posted on November 10, 1781.

> His Majesty recalling his Edit of December 10, 1779, stating that, due to the inconveniences created by the penury of coins in French Guiana, and the inflated value of the piastres and sous marqués [stampees] in circulation over there, the piastres and sous marqués should be traded as payment by the colony's Treasurer on the basis of their specific values of 5 livres 8 sous for the piastre and 4 livres 10 sous for the roll of 60 coins of 18 deniers. It also stated that coins marked with a C were to be sent to the colony as small change…
>
> His Majesty has come to the conclusion that it would be beneficial for the crown as well as for the citizens of Guiana, to lower the value of the piastre, **to remove from circulation the 18 deniers coins** [stampees] which have been damaged by the local climate [replaced by forgeries, actually] and reimbursing them on the basis of 2 sous, which was their original value, and to replace them by the equivalent quantity of billon coins with its specific value of 2 sous, to be circulated solely in the aforementioned colony…

> Therefore, His Majesty has ordered the following:
>
> Art. 1- …
>
> Art. 2- Starting from the same date, the 18 deniers sous marqués [stampees], either in rolls or in loose change **will not be accepted as form of payment of any kind** [bold type by author]**.**

With this document, the stampee was effectively decommissioned (at least as far as French monetary law was concerned) from this point forward in the French Antilles. The influx of easily rendered forgeries had proved impossible to compete against. The proclamation continues:

> Art. 3- His Majesty declares that in two months of the official recording of this ordinance, those in possession of 18 deniers sous marqués [stampees] should return them to the treasury of the colony where they will be reimbursed in either bills of exchange or in piastres traded according to their value aforementioned, or in sous marqués [Cayenne 2 sous] which will be mentioned in the next paragraph. To this effect, the Treasurer will keep a register, verified and countersigned by the Commissioner, on which will be noted… the quantities of sous returned and the value of their reimbursement.
>
> Art. 4- It will be sent to Guiana the necessary quantity of billon coins valued specifically at 2 sous each, with the marking "Colonie de Cayenne", to be circulated under the same value of 2 sous, exclusively in Guiana.
>
> Art. 5- …
>
> Art. 6- An official report will be established by the Controller of the colony, witnessed by the Governor and the Commissioner, stating the quantity of sous marqués of 18 deniers returned to the

> Treasury, as per Art. 3, and stating the sum of money paid by the Treasury in exchange of these coins. The Treasurer will have to enter this official report in his accounts. These aforementioned sous marqués will be stored in drums or crates to be shipped back to France as soon as it can be safely done.[7]

This ordinance is quite specific with regard to the recall and decommissioning of stampees in circulation- at least in the vicinity of Cayenne- along with their replacement by a new billon coin; the Cayenne 2 sous. The fact that the Ordinance of 1781 calls out for a billon replacement reaffirms the idea that from the stampee's inception in 1763 to the point when billon-based Cayenne 2 sous replaced them, official stampees contained intrinsic silver.

Which sou marqué is it?

The stampee is the *sou marqué* under discussion in the Cayenne edicts of 1779 and 1781. The Royal Edict of 1763 (the law initiating stampee production) clearly stated that almost no lower denominational currencies were to be found in general circulation; with the stampee ordered to fill that void. An indirect affirmation of this situation comes from the fact that contemporary counterfeiting operations were only forging and importing fake stampees into the West Indies after 1763, not sous marqués from earlier periods.

However, Zay believed the earlier sous marqués- double sous of 1738-1764- were being addressed in these particular directives rather than the stampees of 1763. He writes:

> In Cayenne, the "Marqué" of 1738 had been devalued to 18 deniers (Royal ordinance of December 10, 1779). The condition

7Zay, pgs. 86-88.

> of this coin had been deteriorated mostly due to the local climate, and it was removed from circulation by the Royal Edict of November 10, 1781. It was reimbursed on the basis of 2 sols, its original value…[8]

The 'curse of the *sou marqué* moniker' had surreptitiously claimed an unwitting victim. Unfortunately, Zay's misunderstanding as to which billon issuance was under discussion would have a sizable and lasting impact on the research and literature that followed. An example of this is seen in Mazard's work.

> 'An edit dated 1738 requested the minting of coins of 2 sols of 24 deniers. The coin was called "Marque" … It was widely used in the colonies. In the Antilles it had a value of 2 sols 6 deniers and it was also called "the black". This coin was used for a long time as loose change for small transactions."[9]

In his portrayal, Mazard leaves the impression that a general availability of 1738-64 sous marqués existed within the West Indies; a viewpoint totally at odds with the description of local conditions as outlined in the Edict of 1763.

Vlack offers a similar interpretation:

> 'Hostilities formally concluded with The Peace of Paris signed in 1763 whereby France ceded their Canadian territories to Britain… How did this event affect the coinage?... all billon coins still in circulation, including the *sous marqués* [double sous of 1738-64], were reduced in value to a farthing and remained in use. This reduction in value caused many to be sent to the Louisiana Territory, New Orleans and the French Colonies

8Zay, pg.67.

9Mazard, J. Pg. 32.

> in the West Indies where they retained their initial value [2 sous] and continued to serve as a basic small change medium.' [10]

He continues: 'A Royal Edict of January 1763 noted how the French Colonies had an even greater need for small denomination coins (*menues monnoies*) since the supply of earlier issues was practically exhausted.' [11]

Vlack's statements contradict each other. The purported service performed in the West Indies by the double sous of 1738-64 would have been extremely short-lived if, according to Vlack, they travelled to the West Indies in 1763 but were then immediately 'exhausted' the same year.

Nonetheless, Vlack appears unbothered by his opposing statements. After all, Mazard had an explanation for the incongruity:

> Realizing it was useless to create a special coin with a favorable value, which would be re-exported despite any restriction to do so, the government decided to import back [to France] these "Marqués" …
>
> These coins, without any silver content, heavily worn-out, were to be stamped on one side with a special stamp showing a crowned C, and destined to be used in the colonies. But in the end, these coins only reached the islands of the Antilles.
>
> Despite its rustic character, this coin, which was immediately named "Tampe", to differentiate it from the "Marqué" which was still in circulation, received a most favorable welcome. [12]

10Vlack, pg. 138.

11Ibid, pg. 139.

12Mazard, pg. 32.

Mazard's mention of the "Marqué" coins of 1738-64 circulating in the West Indies and his reasoning for their exportation back to France reflect Zay's thinking. His explanation for the coins returning to France differs substantially from Vlack's research, which shows the bulk of supplies for stampee hosts arriving from Quebec. Still, both Mazard's and Vlack's comments evolved from Zay's belief that the double sous of 1738-64 were being pinpointed in the French proclamations of 1779 and 1781, not the stampee.

Zay's assertion is easily dismissed by the earlier French Edict of 1763. In this document, the local unavailability of small change is described as the reason behind initiating the new stampee denomination. By all accounts, even if double sous of 1738-64 had circulated previously in the West Indies, by 1763 they were not to be found in meaningful numbers "… those [small denomination] coins have almost all disappeared, and our colonies more than ever in need of small currencies …"

In establishing his viewpoint, Zay needed to completely ignore the information presented in the French Edict of 1763, along with disregarding a clear reiteration of the stampee's prior use found in the Cayenne ordinance of 1781. His oversight in this matter caused a rather simplistic stampee timeline to be unnecessarily complicated by the erroneous inclusion of another sou marqué into the picture.

Blank Planchet stampees

In contemplating Zay's misread of critical source material, it is only natural to wonder whether other aspects of the stampee story may also have been misconstrued by this particular researcher as well. What about his statement that stampees were officially produced on "new flans of billons"? Here is another of Zay's ideas, thoroughly embraced by all the later writers, that could benefit from some additional vetting. Why? An official changeover to blank planchets in 1779 after the previous

overstamping of worn billon hosts is a key detail in today's stampee narrative that has yet to be corroborated by any primary documentation.

Mazard writes, 'In 1774 it became necessary to send another shipment of coins valued at 200,000 livres of Tampés, but since there were no more of the original 1738 sols to stamp, they decided to use new flans to replace the old billon.'[13] Mazard fails to cite the source for his information, but the allusion to Zay's work is obvious.

Interestingly, modern catalogers do not reflect Mazard's date of 1774 in their '*blank planchet*' stampee listings; instead, the year 1779 is listed as the date of issuance. An endnote in an article written by Jan Dyroff in 1987 attempted to sort out the dating discrepancy:

> Although 1779 commonly is given as the issue date for the "new stampee", 1774 is more likely correct. The first modern citation of a general stampee type was made by Ciani (1926), and attention was drawn to the sou marqué and plain flan varieties by Guilloteau (1942). Around 1952 J.D.A. Thompson summarized a statement by Zay in "Histoire Monetaire des Colonies Francaises" that the "new stampee" was extensively imitated beginning in 1779. Jean Mazard (1953) identified the year of issue for the "new stampee" as 1774. F. Pridmore (1965) reflected the data in Thompson's essay but gave 1779 as the year of issue for the piece rather than as the start of the period of imitation. Despite Mazard's research, Craig (1966), perhaps reflecting Pridmore, lists 1779 as the date of issue for the coin, and the Standard Catalog of World Coins by Chester Krause and Clifford Mishler continues to use this date. [14]

13Mazard, pg. 33.

14Dyroff, J. *The Quaint and Curious Stampee*. The Numismatist, April 1987, pg. 760.

Mazard's unverified 'research' appears to be the main support for Dryoff's predisposition to embrace the 1774 date. Archival verification may exist somewhere in France to clear up this detail but to date, no research effort is known to have identified a source for the concept.

Regardless, the whole dating controversy is moot if the idea of changing over to a blank planchet stampee host has no basis in fact. Again, it is important to note that Zay is the earliest writer on record to mention the exclusive use of blank billon flans for stampee production in 1779.

A return to Zay's work finds the statement summarized by J.D.A. Thompson in a footnote by Zay pertaining to counterfeit stampees: '… *most forgeries were done of coins that had been minted in 1779 using the new flans*…'[15] In the text preceding this footnote is Zay's unverified statement, previously presented at the beginning of this paper, describing the official changeover to blank billon planchets.

However, review of the Cayenne ordinance of December 10, 1779, finds no mention whatsoever of official stampees being produced on new blank flans. As with Mazard, Zay does not cite a source for his statement that '… *flans of new billon*…' were required to meet the monarch's order for coins shipped to Cayenne in 1779. At this point, it seems only natural to question whether official action of this sort was ever truly initiated.

Anyone familiar with the various stampee types currently extant will have noticed a distinct shift in the Crowned C style from both official stampees of 1763 and their early forgeries to slightly larger Crowned C designs that only exist today on blank planchets. This observational detail is probably the basis for Zay's notion that blank planchets were officially authorized.

The Crowned C design change was briefly described by Jan Dyroff in his affirmation of Zay's blank planchet concept:

15Zay, pg. 69.

The "new" stampees are known to have been struck on flans of brass, silvered metal, copper and bronze. Though these pieces can be distinguished by the size of the crowned "C," there are numerous variations in the dimensions as well as design elements of the overstamp.[16]

Authentic stampee 'New' Blank Planchet

Early Birmingham Ctft

Figure 1- Transition in style from the original Crowned C design and early Birmingham forgeries to the larger blank planchet stampee style of 1779.

Dyroff's confidence in the blank planchet concept is understandable not only because of the noticeable stylistic change in surviving stampees (see Fig. 1) but also due to the fact that he is not alone in his belief. Zay's blank planchet stampee theory has been embraced over time by a

*"***New Blank Planchet***"*

16Dyroff, pg. 758.

number of notable numismatic researchers: Wood (1914), Thompson (1952), Mazard (1953), Pridmore (1965), Breen (1988) and Vlack (2004); while also receiving recognition as a specific stampee type in William Craig's *Coins of the World 1750-1850*, Krause's *Standard Catalog of World Coins* and the Gadoury/Cousinié *Monnaies Coloniales Françaises* catalog. Quite a consensus of approval. Ordinarily we would expect to find better support than just one man's judgement as the origin for such unanimity, but the fact still remains that no archival verification exists to back up Zay's century-old contention.

There is no question that the blank planchet stampees' characteristic style described by Dyroff entered circulation prior to the rampant regional countermarking known to have occurred around the turn of the 19th century. Local West Indian countermarks left behind on these 'new' stampees offer unassailable proof that blank planchet stampees were produced prior to this period.

A notable discrepancy stands between Zay's statement and Dyroff's description of the 'new' stampees with regard to their composition. While Zay specifies 'flans of new billons', Dyroff identifies planchets consisting of base metal. In an earlier quote, Mazard qualifies Dyroff's statement by also describing these stampees as 'without any silver content'. This disparity definitely clouds the picture, but it might be a blessing in disguise, since proving the validity of Zay's contention may simply hinge on determining whether blank planchet stampees consist of billon or base copper.

Blank Planchet Stampee XRF test results

The fact that blank planchet stampees have design characteristics that allow for accurate segregation from the earlier stampees of 1763 is fortuitous. The visual distinction offers an opportunity for modern XRF testing equipment to nondestructively measure the elemental nature of

both groups for variations in metallic content. Determining whether or not there is continuity in compositional data between early billon-based stampees of 1763 and the blank planchet stampees of 1779 should dispel any questions regarding the stampee's elemental makeup.

From the author's collection, a number of stampees were examined with a certified Olympus XRF hand-held testing device. Stampees of 1763, along with their contemporary forgeries, were tested first to establish an elemental baseline for the study. As would be expected with coins overstruck on billon hosts, nine stampees attributable to 1763 produced assays of silver in the 15-25% range. Eleven of their fake counterparts (the early Birmingham-based forgeries) yielded alloys of copper and zinc (see Appendix 1 for all the XRF test results). These preliminary findings corroborate the French crown's intention, as stated in the 1763 edict, to provide French colonists with a billon coinage; along with also verifying archival evidence describing the influx of base copper counterfeits that followed shortly thereafter.

Fifteen examples of Zay's purported "Edict of 1779" blank planchet stampee were then put to the test. XRF results prove conclusively that none of the blank planchet specimens were manufactured using a billon alloy. Aside from trace silver found on several specimens attributable to the secondary application of a silver wash, all the blank planchet stampees were composed of base metals This evidence matches observations made by Mazard/Dyroff while failing to confirm Zay's statement that 'flans of new billons' were exclusively manufactured to comply with the Cayenne stampee directive of 1779.

It would appear Zay has misinformed us on this matter. The XRF test results determine conclusively that no evidence exists to prove larger modified-style Crowned C stampees were ever officially struck on new billon blank planchets. One obvious conclusion can be drawn from the data. The only stampee types extant today that meets the compositional specifications of the French Edict of 1779 are stampees overstruck on a

sou marqué host- in other words, stampee types currently attributed to the original issuances of 1763.

Probing another Zay Inconsistency

Zay has us believe that new billon stampee planchets were necessary in 1779 because "… there were no more of the original "Marqué" coins to re-use, …". We will return to this point in just a minute. But first, having been merciless in our negative assessment of Zay's stampee research conclusions, it is only appropriate to give Zay credit for accurately conveying the intent of French ministers to provide coinage of billon alloy for use by colonists in the French Antilles. This concept is firmly established in French documents beginning with the stampee's inception in 1763 all the way through its recall and replacement with the Cayenne 2 sous in 1781. Zay communicated the principle accurately.

In an attempt to verify the consistent use of billon by French monetary authorities even after the stampee's recall in 1781, eighteen Cayenne 2 sous were included with the stampee XRF analysis (their compositional metrics will also be found in Appendix 1). Test results revealed that fifteen specimens consisted of a base copper alloy similar in composition to early Birmingham forged stampees. Only three coins contained silver. Of these three billon Cayenne 2 sou examples, one shows evidence of having been overstruck on a sou marqué host of 1738-64.

In a similar study conducted sometime around 1980, Ralph C. Gordon submitted twenty-five Cayenne 2 sous for XRF testing.[17] The examination revealed that only three '… contained silver and were

17Ralph C. Gordon. *Two Sous and the Machine.* Henry Christensen Inc, 150th Anniversary Sale. Tenth Annual New York International Numismatic Convention. December 11 and 12, 1981.

genuine.' His conclusion: 'In a heterogenous group of Cayenne 2 Sous, only one out of eleven, on the average, will be genuine.'

The few authentic specimens uncovered by these two XRF studies suggest that a billon alloy was indeed the original monetary metal of choice for the Cayenne 2 sous coinage, as dictated in the official French decree of 1781 and that worn sous marqués were being utilized in their production. Like the original stampees, the billon Cayenne 2 sou coins were again driven from circulation by base metal forgeries, of which the preponderance of copper Cayenne pieces found in each study group is a direct reflection. These are the same ubiquitous Cayenne 2 sou forgeries consistently vilified in contemporary literature that eventually went on, along with base stampees still in circulation, to attain local official sanction and subsequent countermarking in a number of jurisdictions throughout the West Indies at the turn of the 19th century.

Evidence that Cayenne 2 sous were being overstruck on early sous marqués of 1738-64 in a manner reminiscent of the protocols used in stampee production begs the question- can we truly believe that inventories of old billon were nonexistent at the Paris Mint in 1779, as Zay alleges? It's hard to imagine that mint officials would have initiated Cayenne 2 sous production in this way if supplies of worn billon were limited or no longer available.

Empirical evidence appears to endorse the idea that worn sous marqués maintained their availability at the Paris Mint for use as host planchets during this period in history. Reiterating this possibility is another issuance known to have been produced in Paris on worn billon sous marqués around the same period of time. Vlack writes; 'The same year (1781) also saw the striking of three *sous* for the *Île de France et de Bourbon* (Ciani 2212), and almost all the coinage was struck over French *sous marqués* as planchets.'[18] The implication of this evidence is that

18Vlack, pg. 145

there was no policy change at the Paris Mint from 1763 through 1782, and Zay's assertions that '… there were no more of the original "Marqué" coins to re-use…' and '… they were forced to stamp the new currency on the flans of new billons' may be just another unsupportable premise conjured up on his part.